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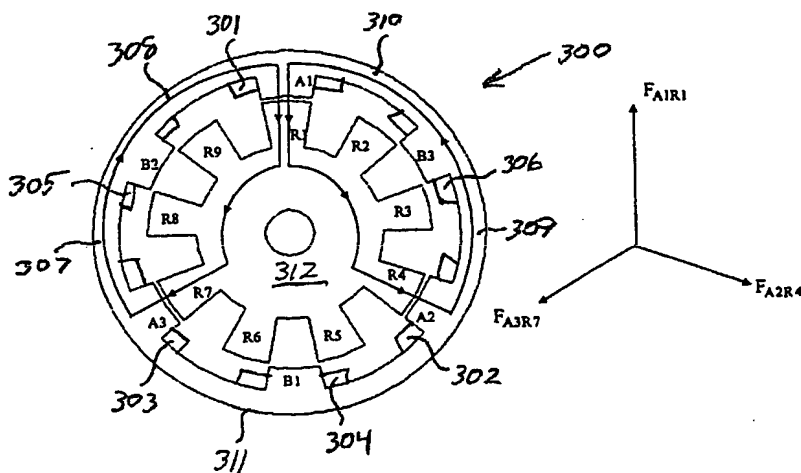
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(54) Title: APPARATUS AND METHOD THAT PREVENT FLUX REVERSAL IN THE STATOR BACK MATERIAL OF A TWO-PHASE SRM (TPSRM)



(57) Abstract: A two-phase switched reluctance motor includes a stator (311) made of ferromagnetic material with stator poles and a rotor (312) made of ferromagnetic material with rotor poles. There are two-phase windings (301-306) on the stator poles. The number of stator and rotor poles are selected such that no flux reversal occurs in any part of the stator core as a result of transitioning between the first and second excitation phases.

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/08114

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H02K 19/00, 17/00, 17/42

US CL : 310/162, 166, 168

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 310/162, 166, 168

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
NONE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,051,903 A (PENGOV) 18 April 2000 (18.04.2000), see entire document.	1-20
X	US 6,194,805 B1 (HEESE et al) 27 February 2001 (27.02.2001), see entire document.	14
Y	US 5,146,127 A (SMITH) 08 September 1992 (08.09.1992), see entire document.	6, 7
Y	US 3,956,678 A (BYRNE et al) 11 May 1976 (11.05.1976), see entire document.	6, 7

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Further documents are listed in the continuation of Box C.

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